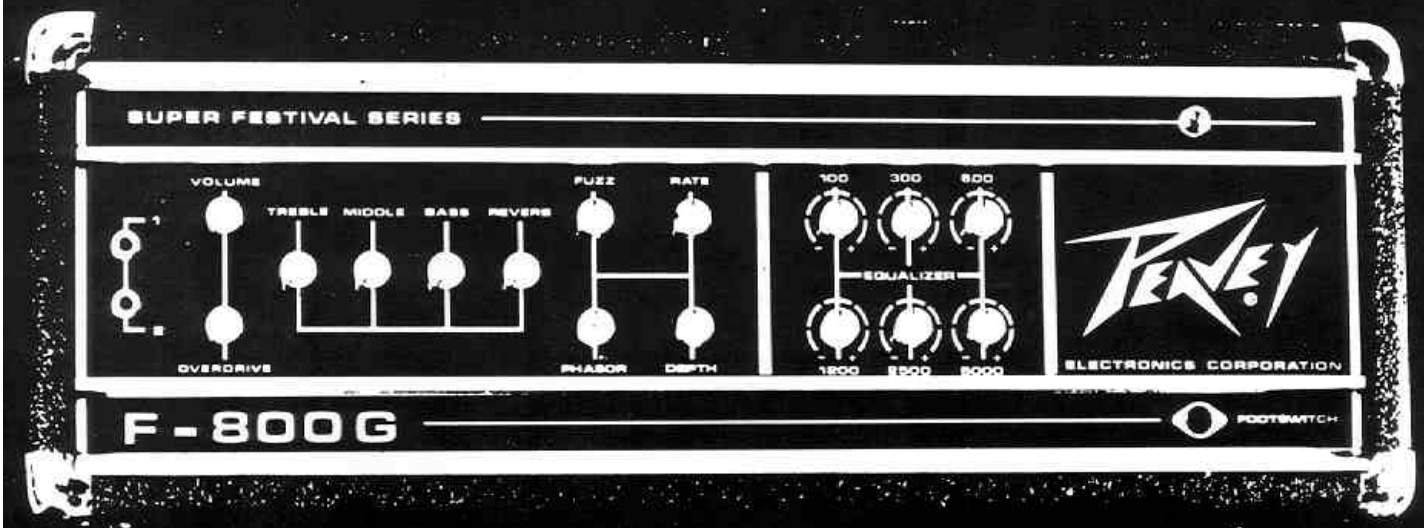
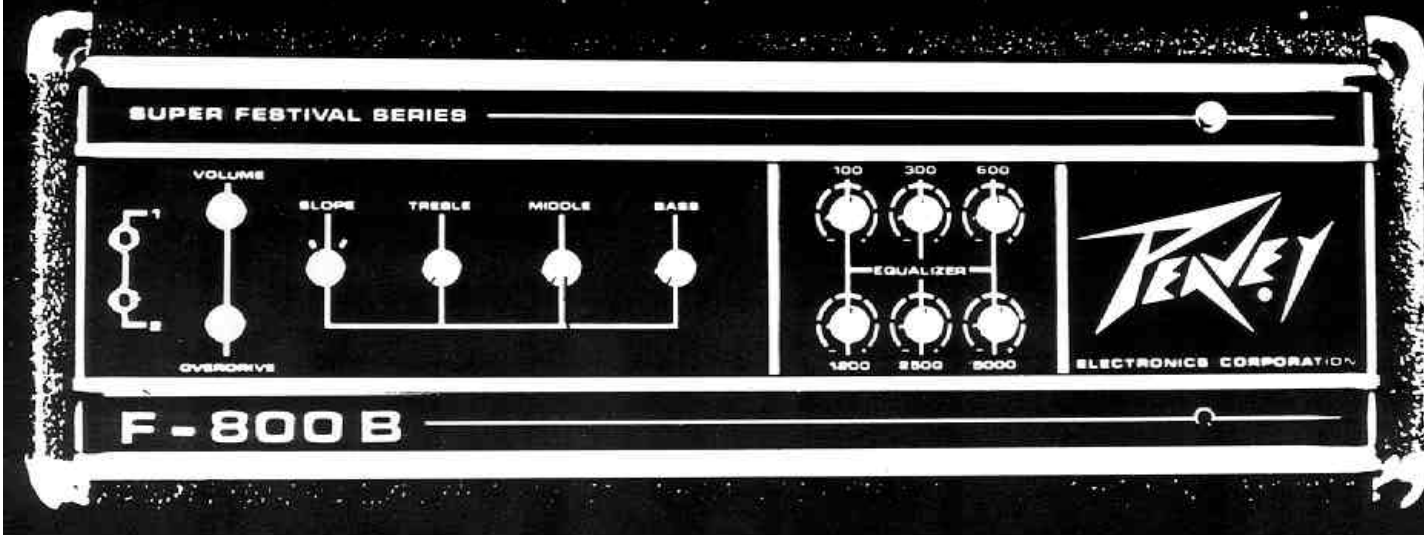


Owner's Manual F800B/F800G



The new Super Festival Series Amplifiers have been designed to fill the requirement for a rugged, extremely powerful unit that will stand up under continuous road conditions. The solid state circuitry of the 800 series features ten high energy output devices mounted on a massive aluminum heatsink. As added insurance against failure, we have added forced air cooling to maintain optimum operating temperature under the most severe playing conditions. The many features of the F-800 series amplifiers give them the tonal flexibility, sustain, and power needed to duplicate the sound of almost any amp and to generate many new sounds at previously un-attainable sound levels. Our unique overdrive/distortion circuitry allows the musician to duplicate the sound of vacuum tube type amplifiers driven into overload. The full compliment of normal tone controls, with the added flexibility of the six channel equalizer, give the F-800 unmatched tonal variation.

The F-800G

The guitar version of the F-800 has reverb, tremolo, distortion/overdrive and fuzz. Overdrive is not the same as fuzz and these two effects may be combined for very interesting distortion effects. The fuzz in the F-800G is very different from conventional circuits since it is a two channel fuzz that allows the blending of both harmonic and fundamental signals to produce a full sounding distortion or the conventional fuzz sound.

The F-800B

The bass version of the F-800B has all the features of the F-800G with the exception of the reverb, tremolo, and fuzz. The important overdrive/distortion feature is included in the bass version and can be used for many novel effects on the longer sustaining bass signals.

1. The input jacks of your F-800 are arranged in a unique switching circuit that allows added flexibility in matching various input levels. Input "1" has about twice as much gain as input "2". If the amp is being overloaded in this more sensitive jack, the less sensitive jack "2" should be used. Generally, it is best to use the higher gain input, if possible.

2. The volume control is used to vary the gain of the preamp. The setting of the volume control does not indicate the output power, but rather is an indication of the sensitivity of the input preamp. It is possible to drive the amplifier to full power with very low volume control settings if the output from your instrument is extremely high.

3. The treble controls are part of an electronic crossover, and serve to boost or cut the high frequencies. The treble controls act as level controls for the high frequencies and are augmented by the use of the last three filters of the equalizer, labeled 1200, 2500, 5000.

4. The middle control is used to tailor the very important middle frequencies. Experimentation will illustrate the importance of this function.

5. The bass control is part of an electronic crossover and serves to boost or cut the lower frequencies. This control should be regarded as a level control for the low end response. This function is augmented by the use of the first three sections of the equalizer, labeled 100, 300, 600.

6. The three position slope control (F-800B only) is a unique method of tailoring the low end rolloff to suit the playing conditions. By rolling off the extreme low end, added punch can be obtained with only slight sacrifice in overall tone. Many times the deep base can be sacrificed for the penetration needed for large outdoor gatherings. The left position of the slope switch is the flat or full response position. The center position allows a 100 hertz rolloff, with the right position providing a 150 hertz rolloff. Experimentation will allow the musician to select the proper position to suit his individual taste or playing requirements.

7. The reverb control is a return level control and determines how much of the delayed reverb signal is mixed back into the normal signal. This control is conventional in operation and should provide more than adequate reverb for any playing requirement. The reverb effect is controlled remotely by depressing the appropriate button of the footswitch.

8. The overdrive control is used to determine the amount of distortion introduced into the output signal. The distortion produced in your F-800 is very similar in harmonic content to the signal produced by an over-driven tube type amp. We have achieved this novel effect through the use of non-linear feedback in a unique and exclusive circuit recently developed by our engineers. Varying the harmonic structure of the signal has the effect of greatly increasing the apparent loudness since the additional harmonics actually multiply the energy of the signal. By adjusting the overdrive control the amount and blend of harmonic distortion can be precisely controlled. Dramatic effects are obtained by setting the overdrive featurel and then tailoring the response with the equalizer and tone controls. The use of the equalizer in conjunction with the overdrive enables the musician to select any tonal range for emphasis and allows sustain, control of harmonics, and coloration never before possible. The dynamics made available with these controls will allow complete freedom in seeking the sound desired for any purpose. It is important to note that the overdrive is not a fuzz type of distortion, and it is characterized by its fullness and softner nature. The overdrive feature is controllable from the remote footswitch by depressing the proper button.

9. The fuzz control (F-800G only) is the output level control for a conventional "clipper" type fuzz unit. This function is similar to conventional fuzz circuits and produces the characteristic fuzz sounds.

The F-800G is equipped with a new dual channel fuzz circuit that allows additional distortion effects that are completely different in nature from those achieved with

overdrive. Further sustain and distortion effects are possible by using the overdrive and fuzz circuits in combination.

10. The phasor control is a part of the fuzz circuit and serves to blend in a mildly distorted signal that is of the same phase as the fuzz signal. The phasor signal is fatter and fuller than the straight fuzz signal with high order second harmonic distortion content.

The two fuzz controls may be considered as comprising a two channel mixer enabling the musician to blend as much sharp (Fuzz) and mellow (Phasor) distortion as desired to get both the proper blend and the proper volume level. Experimentation will be required to find the appropriate settings.

11. The depth control (F-800G only) is the tremolo effect element and determines the amount of amplitude modulation present in the output signal.

12. The rate control is the element controlling the rate of the tremolo and is available from extremely slow to fast speeds. The tremolo is remotely controllable by use of the remote footswitch.

13. The six equalizer controls are used to blend the response characteristics desired in almost any conceivable combination. The six channel equalizer actually divides the tonal spectrum into six segments with each control allowing precise control over its particular band of frequencies. To set up the amp for the best sound, the six equalizer controls should be at the vertical (flat) position. When all the equalizer controls are flat, the course balance should be arrived at through use of the conventional bass, middle, and treble controls. Once the initial coarse balance is obtained the equalizer should be used to "fine tune" the tone until a satisfactory blend is obtained. Operation of the standard tone controls in conjunction with the equalizer will yield almost any tonality imaginable. As with any sophisticated system, a thorogh understanding of the controls and a fair amount of experience is necessary to achieve the desired results. With the overdrive and/or the fuzz in operation it has been found that overboosting the high frequencies tend to emphasize the odd order harmonics and give a more harsh sound. Much smoother effects can be produced by using less top end and more middles and lows. It is important to remember that the equalizer is a true electronic crossover with each control acting as a volume control for its range. The over all loudness is a function of the setting of these controls. The amp should never be operated with all the filters in the extreme cut position. Experimentation will illustrate the fantastic versatility and range of the equalizer circuit.

14. The pilot light indicates when power is applied to the amplifier.

15. The DIN connector is the recepticle for plugging in the remote footswitch.

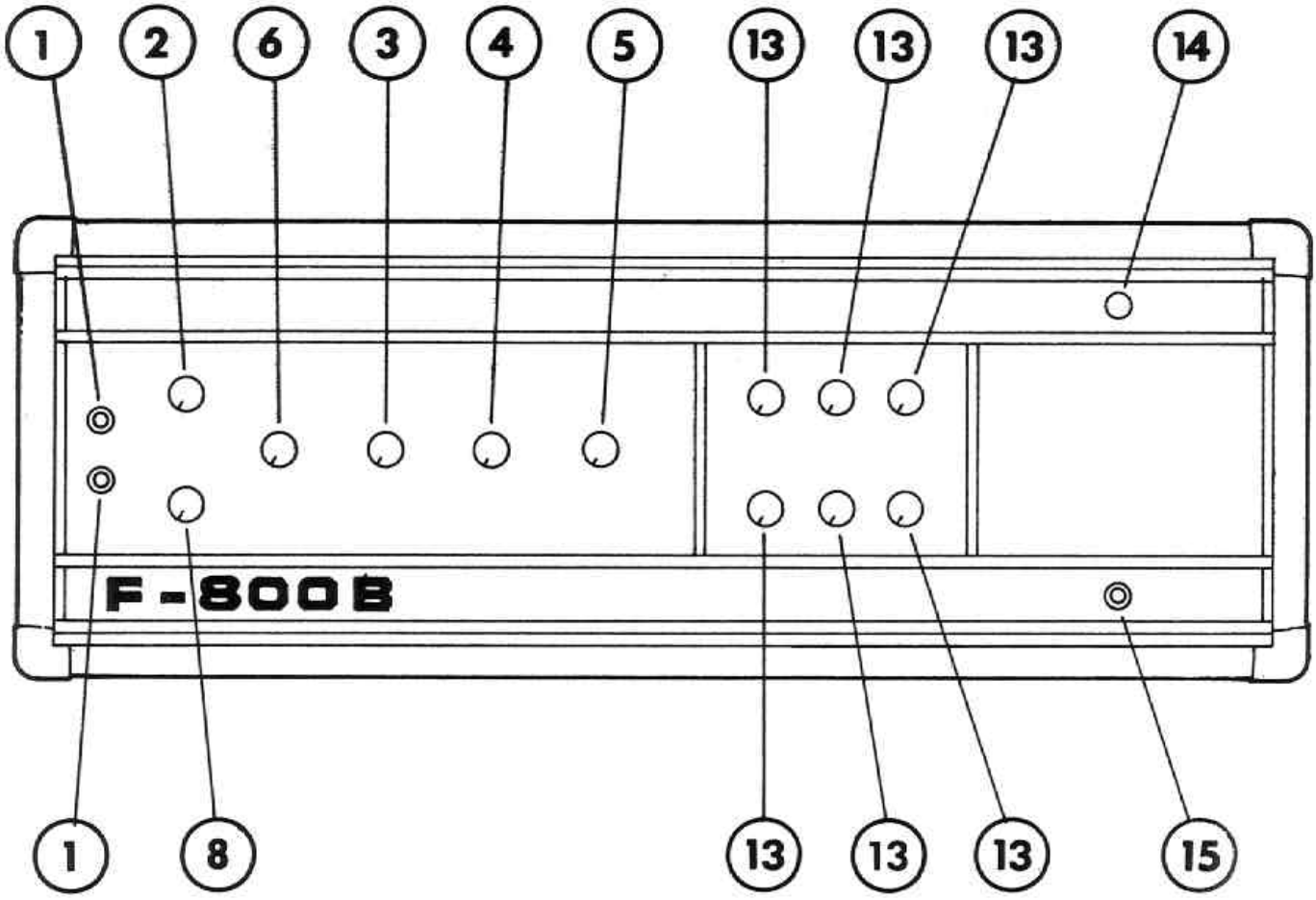
16. The three wire line cord has been provided for your protection and should be connected to the proper line voltage as indicated on the back panel. DO NOT REMOVE GROUND PIN ON PLUG.

17. The fuse is located within the cap of the fuse holder and should be replaced with one of the proper value if it should fail. It is necessary that the proper value fuse be used to avoid damage to the equipment and to avoid voiding the warranty. Models that have circuit breakers can be reset by depressing the red button. If the breaker trips repeatedly, take the unit to a qualified service center for inspection.

18. The line power switch is of the three position type with the center position being OFF. The three position switch has two ON positions which are used to ground the amplifier properly. One of the on positions will yield the least hum or popping when the instrument is touched and this is the position that should be used.

19. The line cord retainers on the rear panel are provided for your convenience in storing the AC line cord during transport of the unit.

20. The two speaker output jacks of the F-800 are designed to deliver slightly more than 400 WATTS RMS into a two ohm load (28.3 VRMS), with the proper line voltage as indicated on the power amp. Each output jack is designed for a four ohm load. These jacks are parallel internally, resulting in the rated two ohm load. NEVER OPERATE THE AMPLIFIER WITH LOADS LESS THAN TWO OHMS. Because this amp is capable of delivering 20 amps of peak current, it is necessary to use very large wire (16 gauge or larger) if extremely long speaker leads are necessary.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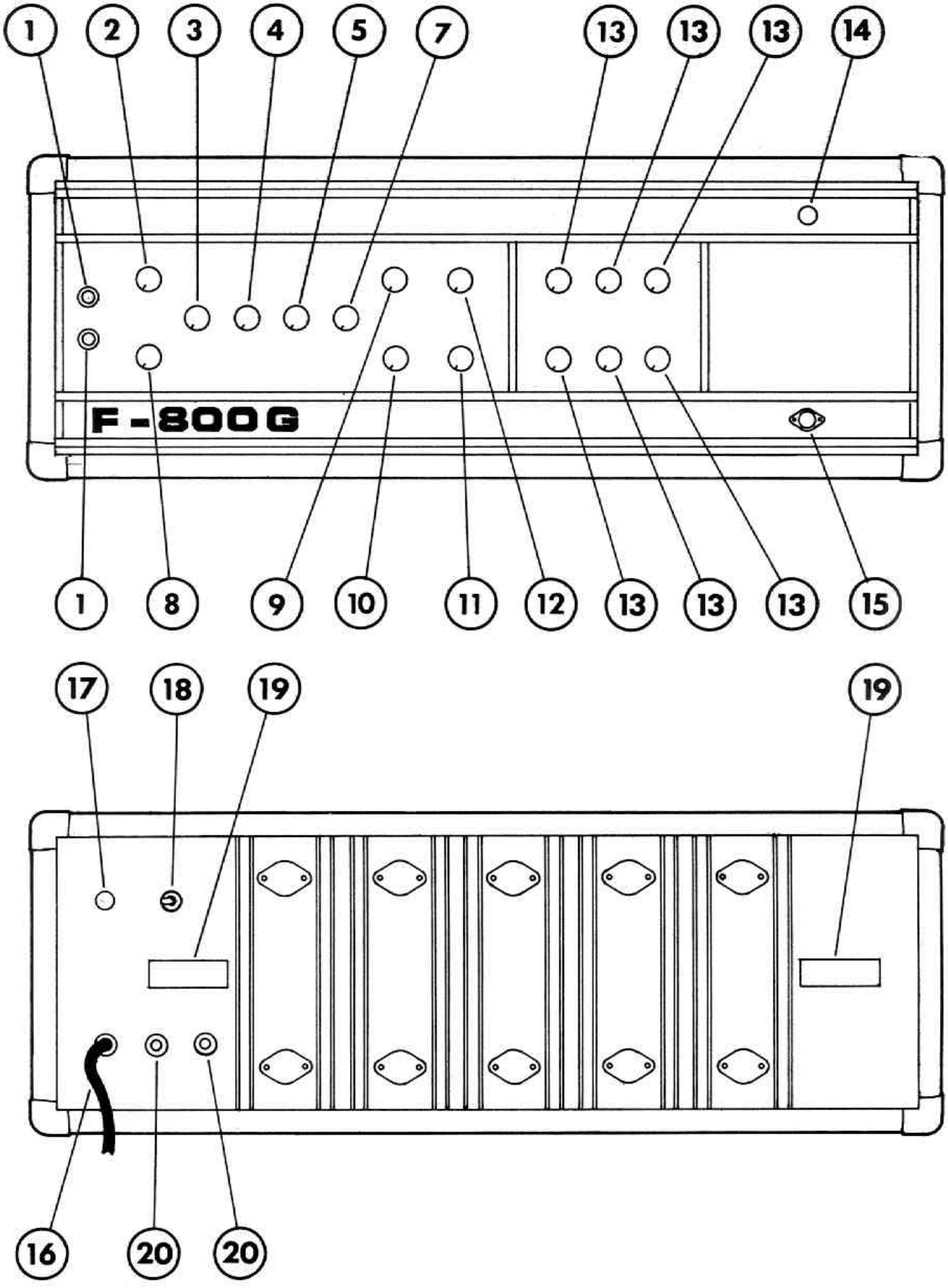
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PEAVEY ELECTRONICS TECHNICAL SPECIFICATIONS

MODEL: F-800B

I. POWER AMPLIFIER SECTION: 800 MODULE

A. Output Power @ 1 KHZ @ 117 VAC Line:

1. Rated Power: 400 W RMS @ Rated Load: 2 OHMS
2. Power vs. Distortion:

LOAD IMPEDANCE	8	4	2	1	OHMS
OUTPUT @ 1% THD	150	260	410	160	W
OUTPUT @ 5% THD	170	290	450	220	W

B. Peak Output @ Rated Load: 20 AMPS & 40 VOLTS, 800 WATTS

C. Music Power Output @ Rated Load: 500 WATTS RMS @ 1% THD

D. Frequency Response: 3 DB Down @ 40 HZ & 15 KHZ

E. Sensitivity @ Rated Power & Load: 800 mV

F. Input Impedance: 10 K OHMS

II. PRE-AMPLIFIER SECTION:

A. Input Characteristics: (Tone Controls Flat, Volume @ 12:00)

1. Sensitivity: 30 mV @ 1 KHZ
2. Input Impedance: 330 K OHMS
3. Noise: 60 DB (Open Ckt), 68 DB (50 K OHMS) 74 DB (Short Ckt)*

B. Distortion @ 1 KHZ @ Rated Output: Less Than 0.1% THD**

C. Frequency Response: 3 DB Down @ 40 HZ & 30 KHZ

D. Tone Controls: ± 20 DB @ 50 HZ & 5 KHZ

E. Middle Control: 20 DB Cut

F. 6 Channel Equalizer: ± 12 DB each Channel

G. Distortion Control: Variable Harmonic Distortion with Foot-switch Cut-off

H. Slope Control: Switch selected Low Frequency Roll-Off

* Signal-to-noise ratio in DB below rated output

** Measured with Distortion control cut-off (Full CCW)

PEAVEY ELECTRONICS TECHNICAL SPECIFICATIONS

MODEL: F-800G

I. POWER AMPLIFIER SECTION:

A. Output Power @ 1 KHZ @ 117 VAC Line: 800 MODULE

1. Rated Power: 400 W RMS @ Rated Load: 2 OHMS
2. Power vs. Distortion:

LOAD IMPEDANCE	8	4	2	1	OHMS
OUTPUT @ 1% THD	150	260	410	160	W
OUTPUT @ 5% THD	170	290	450	220	W

B. Peak Output @ Rated Load: 20 AMPS & 40 VOLTS, 800 WATTS

C. Music Power Output @ Rated Load: 500 WATTS RMS @ 1% THD

D. Frequency Response: 3DB Down @ 40 HZ & 15 KHZ

E. Sensitivity @ Rated Power & Load: 800 mV

F. Input Impedance: 10 K OHMS

II. PRE-AMPLIFIER SECTION:

A. Input Characteristics: (Tone Controls Flat, Volume @ 12:00)

1. Sensitivity: 30 mV @ 1 KHZ
2. Input Impedance: 330 K OHMS
3. Noise: 60 DB (Open Ckt), 68DB (50 K OHMS) 74 DB (Short Ckt)*

B. Distortion @ 1 KHZ @ Rated Output: Less Than 0.1% THD **

C. Frequency Response: 3DB Down @ 40 HZ & 30 KHZ

D. Tone Controls: ± 20 DB @ 50 HZ & 5 KHZ

E. Middle Control: 20 DB Cut

F. 6 Channel Equalizer: ± 12 DB each Chan.

G. Reverb Control: Continuously Variable with Foot-switch Cut-Off

H. Distortion Control: Variable Harmonic Distortion with Foot-switch Cut-Off

I. Fuzz Control: Adjustable Attack & Harmonics with Foot-switch Cut-off.

J. Tremolo Controls: Variable Depth & Rate with Foot-switch Cut-Off

K. Slope Control: Switch selected Low Frequency Roll-Off

*Signal-to-noise ratio in DB below rated output

** Measured with Distortion, Reverb, Fuzz, & Tremolo controls cut-off (Full CCW)

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Printed in U.S.A.